BARRIERS TO REPORTING MEDICATION ADMINISTRATION ERRORS AMONG NURSES IN PRIVATE HOSPITALS IN PESHAWAR

Haseena Gul Muhammad[1], Qazi Amir Raheem[2], Bakht-E-Karam[3], Irum Afsar Ali[4], Farida[5], Abdul Ahad[6]

Correspondence

[1]Haseena Gul Muhammad, Nursing Lecturer and Year Coordinator, The Health Care Institute of Nursing Peshawar
✆: +92-311-9537067
✉: haseenashinwari54@gmail.com
[2]Charge Nurse, Shifa International Hospital, Islamabad
[3]Nursing Lecturer and Year Coordinator, The Health Care Institute of Nursing Peshawar
[4]Vice Principal, Rufaidah Nursing College, Peshawar
[5]Nursing Lecturer and Year Coordinator, The Health Care Institute of Nursing Peshawar
[6]Charge Nurse, Shaukat Khanum Memorial Cancer Hospital and Research Centre, Peshawar

How to cite this article

Haseena GM, Raheem QA, Karam BE, Ali IA, Farida, Ahad A. Barriers to Reporting Medication Administration Errors among Nurses in Private Hospitals in Peshawar. J Farkhanda Inst Nur Pub Health. 2023;3(1): 3-5

ABSTRACT

OBJECTIVES

To assess the barriers to reporting medication administration errors among nurses in Private tertiary care hospitals.

METHODOLOGY

A cross sectional-descriptive design was used. Data was collected through self-generated questionnaire from of two hundred and twenty-three nurses working in private tertiary care hospitals of Peshawar. Data was calculated for mean and standard deviation (age), frequencies, percentages (education, nurses, age, gender etc.), and presented in graphs, tables, and charts. Prior to this study approval was taken from Ethics Review Board of Prime Foundation Pakistan.

RESULTS

The study revealed that the strongest barrier was fear (group mean=18.76). The nurses tended to have the highest level of agreement with "being blame for medication administration errors results and adverse consequences from reporting". The weakest perceived barrier was the administrative barrier (13.86). Nurses tended to have the highest level of agreement with "No positive feedback".

CONCLUSION

The study revealed that the reporting with medication administration error is low in Peshawar. Proper awareness is very necessary to improve error reporting. Education programs may help in bringing awareness among nurses.

KEYWORDS: *Medication Administration Error, Reporting, Barrier, Nurses*

INTRODUCTION

Medication administration errors (MAE) are holding to be the most familiar kinds of medical errors. Medication errors are specific to preventable events that can cause or foremost to improper medication use or patient injury.[1] Medication error basically come by the authority tread of the medication procedure reason for 87% of all medication errors. The ratio of the deaths occurring by medication errors in US has been evaluated as 44000 to 98000 which more than the ratio of deaths by the breast cancer, highway trade accident and immune deficiency disease.[2] A single medication error may prolong hospital stay or cause even death. This affects the quality and continuity of health care services.[3] Review of barriers to MAE reporting as sensed by nurses have determine several factors modify to under-reporting; lack of knowledge of the definition of a medication error, fear of being blamed by the colleagues and supervisors, lack of feedback from the manager after reporting.[4] Medication error occur at the specific stage of medicine or administration stage of medicine. For example organized, review conducted in middle Eastern countries reported 7.1%-90% medication errors associated with prescribe the medication and 9.4% 80% medication errors associated with administering the medication.[5] Underreporting of dangerous events is rate to range from 50%-96% annually.[6] 10-18% of all reported hospital injuries have been specific to medication errors.[7] Estimates indicated that 50-96% of unfavorable events are never reported.[8] The average error reports in the USA is 40-50%, in the UK it is 22-39% and in Taiwan 30-48%.[9] Preventable medical errors harm at least 1000 people per day.[10] Leape stated that the most important reason physicians and nurses have not evolve more effectual means for preventing errors Underreporting of dangerous events is rate to range from 50%-96% annually.[11] 10-18% of all reported hospital injuries have been specific to medication errors.[12] The average error reports in the USA is 40-50%, in the UK it is 22-39% and in Taiwan 30-48% Preventable medical errors harm at least 1000 people per day.[10,12] The most important reason physicians and nurses have not evolved more effectual means for preventing error.[13] In Pakistan, overall medication error rate is 5.5% of which 1.9% are made by nurses. Agha khan hospital holding 6 to 7 medication error per month and compose normally 72 to 78 errors annually the pharmacological branch reports 4056 yearly possible medication error. If medication administration errors are reported on time it can decrease patients mortality rates, injuries, abuse,

long stay of hospital and also, we save patient life.[11] To improve error reporting there is need to understand barriers that lead to low error reporting. The aim of this study is to explore nurses perceptions of barriers to reporting medication administration errors. To investigate the relationship between the nurses demographic variables and their perception of reporting of MAEs.

METHODOLOGY

A quantitative cross sectional-descriptive design was used for this study. The study setting was private care hospitals in Peshawar including Rehman Medical Institute, Mersi Teaching Hospital, Kuwait Teaching Hospital and North West General Hospital. The sample size for this study was 223 nurses which data was analyzed through software SPSS version 22. For which Data collected through self-generated questionnaire the 5-point Likert-type scale. The Cronbach Alpha of the questionnaire is 0.78. Data calculated for mean and standard deviation (age), frequencies, percentages (Education, nurses, age, gender etc.) and presented in graphs, tables and charts. ANOVA and T- test were applied to see statistically significant difference between the mean of fear and administrative barriers, sub-scales score to reporting MAEs.

RESULTS

The table data show Frequency and percentage of demographic variables that is gender and experience of nurses. The Demographic include gender, work experience, ever involved in medication error and failed to report medication error are presented in Table 1.

Table 1: Frequency and Percentage of Demographic Variables

Variable		F	%Age
Gender	Male	62	27.8
	Female	161	72.2
Experience	1-4	200	89.7
	5-8	14	06.2
	9-12	06	02.6
	13-16	03	01.2

Table 1: Frequency and Percentage of Demographic Variables

Sub scale	Items	Group M/SD	Items (CD)
	Barriers to MAE reporting Fear of	18.76 (06.529)	
1	Being blame for MAE results		3.36(0.900)
2	Adverse consequences from reporting		3.24(1.145)
3	Patient negative attitude		3.23(1.256)
4	Physician"s reprimand		3.05(1.045)
5	Not recognize MAEs occurred		2.89(1.067)
6	Being recognized as incompetent		2.99(1.116)
	Reporting Error	15.26 (06.811)	
7	Much time for filling reports		2.88(1.020)
8	Much time for contacting physicians		2.92(1.144)
9	Unclear about MAE definitions		2.59(1.292)
10	Disagreement over MAE		2.24(1.031)
11	Unrealistic expectations for administrating drugs Correctly		2.55(1.229)
	Administrative Barriers	13.86 (04.752)	
12	No positive feedback		3.42(1.355)
13	Much emphasis on MAE as nursing quality provided		3.41(0.964)
14	Focus on individual rather than system factors to MAEs		3.85(1.201)
15	Administrators responses to MAE do not match the Severity of the errors		3.18(1.232)

The strongest perceived barrier were fear (group mean=18.76) of the 6-items fear listed in table 2, the nurses tended to have the highest level of agreement with "being blame for MAE results and adverse consequences from reporting" the items of Fear sub scale with mean less than 5 all of them. The weakest perceived barrier was the administrative barrier (13.86). Nurses have tended to have the highest level of agreement with "No positive feedback". Most of nurses shows disagreement with the reporting process. And it is weakest perceived barrier among nurses. ANOVA indicated there was a statistically significant difference between the mean of fear and administrative barrier subscales score of barriers to reporting MAEs.

DISCUSSION

Medication error is the biggest danger for the health of patients and can lead to very serious complication and even, it leads death. The aim of this study is to identify the barriers due to which the nurses don't reporting those errors. This study shows that it is necessary to develop a planned program towards reporting medication administration error or dangerous events by nurses and the program should be promote and insure safety. In a study about factors associated with reporting nursing errors in Iran where he reported that

the most common barriers preventing reporting the medical errors include: fear of legal action and job threats, fear of economic losses, fear of honor and dignity, weakness of knowledge and weakness of nursing skills in error management.[2] Similarly another study on barriers to nurses reporting of medication administration errors in where he showed that the most common factors preventing reporting of the medical errors are no positive feedback for giving medication correctly and fear was considered as a major barrier. Similar findings were also supported in previous studies by using the same study instrument.[7] Yet in another study in Tabriz conducted by on the nurses, the results indicated that in the area of fear from the consequences of reporting, fear from legal issues (73.5%) and in the area of administrative factors,

CONFLICT OF INTEREST: None

FUNDING SOURCES: None

REFERENCES

1. Ala'a ZM, Aljasser IA, Sasidhar B. Barriers to reporting medication administration errors among nurses in an accredited hospital in Saudi Arabia. BJEMT. 2016;11(4):1-3.
2. Fathi A, Hajizadeh M, Moradi K, Zandian H, Dezhkameh M, Kazemzadeh S, Rezaei S. Medication errors among nurses in teaching hospitals in the west of Iran: what we need to know about prevalence, types, and barriers to reporting. Epidemiol Health. 2017;39.
3. Jember A, Hailu M, Messele A, Demeke T, Hassen M. Proportion of medication error reporting and associated factors among nurses: a cross sectional study. BMC nurs. 2018 ;17(1):1-8.
4. Tabatabaee SS, Kalhor R, Nejatzadegan Z, Kohpeima Jahromi V, Sharifi T. Barriers to medication error reporting from nurses' perspective: A private hospital survey Int. J. Hosp. Res. 2014;3(2):97-102.
5. Bashaireh AM, Jaran MS, Alobari RI, Al-khani SM. Understanding the nature, contributing factors, and corrective actions of medication administration errors: Insights from Saudi Arabia. Int J Qual Health Care; I. 2019 ;2(3):58-64.
6. Najafpour Z, Arab M, Yaseri M, Hatamizadeh M, Goudarzi Z, Bahramnezhad F, Shayanfard K. Understanding the Barriers to Nurses Error Reporting and Disclosure: A Mixed Methods Study.2020:1–19.
7. Cebeci F, Karazeybek E, Sucu G, Kahveci R. Nursing students' medication errors and their opinions on the reasons of errors: A cross-sectional survey. J Pak Med Assoc. 2015;65(5):457-62.
8. Peyrovi H, Nikbakht Nasrabadi A, Valiee S. Exploration of the barriers of reporting nursing errors in intensive care units: A qualitative study. J Intensive Care Soc. 2016 Aug;17(3):215-21.
9. Mansouri SF, Mohammadi TK, Adib M, Lili EK, Soodmand M. Barriers to nurses reporting errors and adverse events. Br. J. Nurs 2019 ;28(11):690-5.
10. Hung CC, Chu TP, Lee BO, Hsiao CC. Nurses' attitude and intention of medication administration error reporting. J. Clin. Nurs.. 2016 Feb;25(3-4):445-53.
11. Wakefield BJ, Uden-Holman T, Wakefield DS. Administration Error Reporting Survey. Advances in patient safety: from research to implementation. 2005; 4:475.
12. Wakefield BJ, Uden-Holman T, Wakefield DS. Administration Error Reporting Survey. Advances in patient safety: from research to implementation. 2005;4:475.
13. Khowaja K, Nizar R, Merchant RJ, Dias J, Bustamante-Gavino I, Malik A. A systematic approach of tracking and reporting medication errors at a tertiary care university hospital, Karachi, Pakistan. Ther Clin Risk Manag 2008 ;4(4):673-9.
14. Ali I, Ahmad W, Ullah AR, Khan F, Ijaz M, Khan S, Khan TM. Knowledge, attitude, and barriers toward ADRs reporting among health-care professionals at tertiary care health settings in Peshawar, Pakistan: a web based study. Hospital Pharmacy. 2021 Aug;56(4):384-91.
15. Wakefield BJ, Uden-Holman T, Wakefield DS. Administration Error Reporting Survey. Advances in patient safety: from research to implementation. 2005;4:475.
16. Ali LA, Saifan AR, Alrimawi I, Atout M, Salameh B. Perceptions of nurses about reporting medication administration errors in Jordanian hospitals: A qualitative study. Applied Nursing Research. 2021 Jun 1;59:151432.
17. Dehnavieh R, Saberi H, Nouri-Hekmat S, Barkhordari F, Norouzi S, Moradi M. The Barriers to Reporting Medical Errors in the Nursing Profession and Corrective Actions. Health Information Management. 2020 Dec 21;17(5):209-15.
18. Ghobadian S, Zahiri M, Dindamal B, Dargahi H, Faraji-Khiavi F. Barriers to reporting clinical errors in operating theatres and intensive care units of a university hospital: a qualitative study. BMC nursing. 2021 Dec;20:1-1.

CONTRIBUTORS

1. ***Haseena Gul Muhammad*** *- Concept & Design; Data Acquisition; Drafting Manuscript; Critical Revision; Supervision; Final Approval*
2. ***Qazi Amir Raheem*** *- Data Acquisition; Data Analysis/ Interpretation; Critical Revision; Final Approval*
3. ***Bakht-E-Karam*** *- Concept & Design; Drafting Manuscript; Critical Revision; Final Approval*
4. ***Irum Afsar Ali*** *- Critical Revision; Supervision; Final Approval*
5. ***Farida*** *- Concept & Design; Data Acquisition; Data Analysis/Interpretation*
6. ***Abdul Ahad*** *- Concept & Design; Data Acquisition; Data Analysis/Interpretation*